#### **CLAIMS**

1. (Previously Amended) A method for determining if an item is a fraudulent item, the method comprising the steps of:

obtaining a first number from an RFID tag associated with the item or item's packaging; determining a second number that is a eryptographic public-key signature printed on the item or item's packaging;

utilizing a <u>public-key</u> cryptographic process and the first number to cryptographically verify the second number; and

determining the product's authenticity based on the verification.

Please cancel claims 2-4

- 5. (Original) The method of claim 1 wherein the step of determining the products authenticity comprises the step of associating the product with an authentic product if the signature is verified, otherwise associating the product with a forged product.
- 6. (Previously Amended) A method of manufacturing a product in order to prevent forgery, the method comprising the steps of:

obtaining an RFID tag comprising a first number;

determining a second number utilizing the first number and a cryptographic process, wherein cryptographic verification of the second number insures the product's authenticity;

affixing the RFID tag comprising the first number to either the product or the packaging associated with the product; and

affixing the second number to either the product or the packaging associated with the product.

- 7. (Original) The method of claim 6 wherein the step of obtaining the tag comprising the first number comprises the step of obtaining an RFID tag comprising a unique, or semi-unique unalterable number.
- 8. (Original) The method of claim 6 wherein the step of affixing the second number to either the product or the packaging associated with the product comprises the step of printing a cryptographic signature on the product or the product's packaging.

9. (Original) The method of claim 6 wherein the step of determining the second number utilizing the first number and a cryptographic process comprises the step of utilizing the first number and a private key to generate the second number.

#### 10. (Previously Amended) A method comprising the steps of:

obtaining a first number from an RFID tag associated with an item;

obtaining a second number that is a cryptographic signature printed on the item or the item's packaging;

utilizing a public key and the first number to verify the second number; and determining the item's authenticity based on the verification.

# 11. (Previously Amended) A method comprising the steps of:

obtaining an RFID tag comprising a first number;

utilizing a private key and the first number to create a second number that is a cryptographic signature, such that cryptographic verification of the second number insures a product's authenticity; and

affixing the second number and the RFID tag to the item or the item's packaging.

Please cancel claims 12-14

# 15. (Currently Amended) A product scanner comprising:

an RF tag reader outputting contents of an RFID tag;

an optical scanner outputting a public-key cryptographic signature; and

logic circuitry having the contents of the RFID tag and the <u>public-key</u> cryptographic signature as an input and outputting information as to whether an item is a forgery.

16. (Original) The product scanner of claim 15 wherein the logic circuitry utilizes a public key and cryptographic operations to verify the cryptographic signature.

### 17. (Currently Amended) An apparatus comprising:

an RF reader outputting contents of an RFID tag;

logic circuitry having the contents of the RFID tag as an input and outputting a <u>public-</u>key cryptographic signature based on the contents of the RFID tag; and

printing circuitry having the <u>public-key</u> cryptographic signature as an input and printing the <u>public-key</u> cryptographic signature upon an item or packaging.

18. (Previously Amended) The apparatus of claim 17 further comprising: an RFID writer outputting product information for the item to the RFID tag.